



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

June 10, 2005

B-19J

Chief, Rules Review and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

**Re: Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 20: Donald C. Cook Nuclear Plant, Units No. 1 and 2, Berrien County, Michigan, Final Report, NUREG-1437, EIS No. 20050185**

Dear Sir or Madam:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (U.S. EPA) has reviewed the Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 20 (SEIS): Donald C. Cook Nuclear Plant (Cook Nuclear Plant), Units No. 1 and 2 (Cook Units 1 and 2), which is a final report. According to the SEIS, the current operating licenses for Cook Units 1 and 2 will expire on October 2014 and December 2017, respectively. The proposed Federal action would renew the current operating licenses for an additional 20 years.

The Nuclear Regulatory Commission (NRC) developed the Generic Environmental Impact Statement (GEIS) to streamline the license renewal process on the premise that environmental impacts of most nuclear power plant license renewals are similar, in most cases. NRC develops facility-specific SEISs for individual plants as the facilities apply for license renewal. EPA provided comments on the GEIS during its development process--for the draft version in 1992, and for the final version in 1996.

The Cook Nuclear Plant is located in Lake Charter Township, Berrien County, Michigan, on the southeastern shoreline of Lake Michigan. Cook Units 1 and 2 are pressurized light-water reactors. Cook Unit 1 produces a reactor core power of 3304 megawatts-thermal, and has a design net electrical capacity of 1044 megawatts. Cook Unit 2 produces a core power of 3468 megawatts-thermal, and has a design net electrical capacity of 1117 megawatts. Each unit is refueled every 18-months. The condenser cooling system for Cook Nuclear Plant is a once-through circulating water system that draws from and discharges to Lake Michigan.

U.S. EPA submitted comments on the draft SEIS on December 8, 2004. Based on our review of the final SEIS, we retain the concerns we raised in our previous letter. Our concerns relate to:

1. Adequacy and clarity of information provided, including radiological impacts and risk estimates, and
2. Entrainment of fish and shellfish in early life stages.

Regarding the first concern, we find the final SEIS does not adequately disclose information which should be used to assure minimal exposures to the public, as well as site workers. We strongly encourage NRC to revise its responses to our concerns, in order to develop a more comprehensive and site-specific environmental document.

Also, we are still concerned about entrainment of fish and shellfish in early life stages. Under a U.S. EPA rule, codified in 40 C.F.R. § 125 (U.S. EPA Rule), Cook Nuclear Plant is required to reduce its entrainment of fish and shellfish in early life stages. Under the U.S. EPA Rule, Cook Nuclear Plant is required to choose one of five compliance alternatives to reduce entrainment, and the compliance alternative must meet a regulatory performance standard. In our December 8, 2004 comment letter, we stated that the final SEIS should indicate the plant's compliance alternative (including any existing measures, such as an off-shore intake located in an area that does not serve as a fish nursery), and targeted performance standard. In response, the final SEIS states that the project proponents will allow the Michigan Department of Environmental Quality to define how the Cook Nuclear Plant will comply with the U.S. EPA rule, through conditions in a NPDES permit. We believe that the project proponents should take a more proactive role to determine and disclose the plant's proposed compliance alternative and regulatory performance standard, because (1) the project proponents must assess the feasibility of complying with the rule, and (2) listing this information would provide a comprehensive public disclosure of plans to reduce entrainment. Therefore, we request the project proponents to determine and disclose the proposed compliance alternative and performance standard, which would most likely be proposed in the NPDES permit application, for Cook Nuclear Plant in the Record of Decision.

If you have any questions or wish to discuss any aspect of the comments, please contact Michael Murphy (for radiation issues) at (312) 353-6686 or Newton Ellens (for NEPA-related issues) at (312) 353-5562.

Sincerely,

/s/

Kenneth A. Westlake, Chief  
NEPA Implementation Section  
Office of Science, Ecosystems, and Communities